

**ABSTRACT**

The invention provides a graphic engine and a method that reduces the idle time of the graphic engine by validity test. The validity test is performed when the back buffer is full and the graphic engine continues to write a primitive into a front buffer. The validity test compares the maximum Y-coordinate of the primitive with the Y-coordinate of the current scan line. If the maximum Y-coordinate of the primitive is less than the Y-coordinate of the current scan line, the graphic engine keeps on executing the primitive processing procedure. On the other hand, if the maximum Y-coordinate of the primitive is greater than or equal to the Y-coordinate of the current scan line, the graphic engine halts the primitive processing procedure until the maximum Y-coordinate of the primitive is less than the Y-coordinate of the current scan line.

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